SEARCH FUNCTIONS FOR SPREADSHEETS

BACKGROUND

[0001] The present disclosure relates generally to searching portions of spreadsheets via evaluation statements (i.e., functions), such as a table within a spreadsheet application.

[0002] Spreadsheet applications, as well as other types of applications, may use rows and columns of cells (such as arrays or tables of such cells) in which a user enters or manipulates data for calculation or presentation. Tables of cells used in such applications may range from a limited number of cells in simple or straightforward implementations to much larger arrays of cells in more complex scenarios. The tables may be used to relay and organize data to a user for various scenarios. Often an application may allow a user to define an evaluation statement (i.e., a function) within a cell that provides a calculation to perform and/or references other cells within the spreadsheet. Oftentimes, a user may be interested in retrieving only a portion (e.g., a subset) of the data that a particular cell contains. As such, it may be beneficial for a user to search, via a function, a certain portion of data from within a cell to enhance conventional spreadsheet searching capabilities.

[0003] This section is intended to introduce the reader to various aspects of art that may be related to various aspects of the present disclosure, which are described and/or claimed below. This discussion is believed to be helpful in providing the reader with background information to facilitate a better understanding of the various aspects of the present disclosure. Accordingly, it should be understood that these statements are to be read in this light, and not as admissions of prior art.

SUMMARY

[0004] A summary of certain embodiments disclosed herein is set forth below. It should be understood that these aspects are presented merely to provide the reader with a brief summary of these certain embodiments and that these aspects are not intended to limit the scope of this disclosure. Indeed, this disclosure may encompass a variety of aspects that may not be set forth below.

BRIEF DESCRIPTION OF THE DRAWINGS

[0005] Various aspects of this disclosure may be better understood upon reading the following detailed description and upon reference to the drawings in which:

[0006] FIG. 1 is a block diagram of an electronic device that may use the techniques disclosed herein, in accordance with aspects of the present disclosure;

[0007] FIG. 2 is a front view of a handheld device, such as an iPhone® by Apple Inc., representing an example of the electronic device of FIG. 1;

[0008] FIG. 3 is a front view of a tablet device, such as an iPad® by Apple Inc., representing an example of the electronic device of FIG. 1;

[0009] FIG. 4 is a perspective view of a notebook computer, such as a MacBook Pro® by Apple Inc., representing an example of the electronic device of FIG. 1;

[0010] FIG. 5 illustrates an example of a graphical user interface (GUI) interface screen of a spreadsheet application in accordance with aspects of the present disclosure;

[0011] FIG. 6 depicts a process flow diagram depicting control logic of a process for enhanced searching capabilities in a spreadsheet application, in accordance with aspects of the present disclosure;

[0012] FIG. 7 depicts a process flow diagram depicting control logic of the identification of a function type step of the process of FIG. 6, in accordance with aspects of the present disclosure;

[0013] FIG. 8A-8C illustrate examples of portions of the spreadsheet application GUI interface screens illustrating evaluation statements evaluated in the spreadsheet application in accordance with aspects of the present disclosure;

[0014] FIG. 9 illustrates an example of the spreadsheet application GUI interface screen illustrating an evaluation statement evaluated in the spreadsheet application in accordance with aspects of the present disclosure;

[0015] FIG. 10 illustrates an example of the spreadsheet application GUI interface screen illustrating an evaluation statement evaluated in the spreadsheet application that results in an error message being displayed in accordance with aspects of the present disclosure;

[0016] FIG. 11 illustrates an example of the spreadsheet application GUI interface screen illustrating a wild card search feature used in an evaluation statement that is evaluated in the spreadsheet application in accordance with aspects of the present disclosure;

[0017] FIG. 12 illustrates an example of a portion of the spreadsheet application GUI interface screen for performing a TEXTBETWEEN function in the spreadsheet application in accordance with aspects of the present disclosure;

[0018] FIG. 13A illustrates an example of a portion of the spreadsheet application GUI interface screen illustrating an evaluation statement evaluating non-text data in the spreadsheet application in accordance with aspects of the present disclosure;

[0019] FIG. 13B illustrates an example of a portion of the spreadsheet application GUI interface screen illustrating an evaluation statement for evaluating non-text data in the spreadsheet application in accordance with aspects of the present disclosure;

[0020] FIG. 14 illustrates a process for converting a value of a source string attribute to a string value in accordance with aspects of the present disclosure;

[0021] FIG. 15 illustrates a process for converting a value of a search string attribute to a string value in accordance with aspects of the present disclosure; and

[0022] FIG. 16 illustrates a process for maintaining a dependency tree of the evaluation statements in accordance with aspects of the present disclosure.

DETAILED DESCRIPTION OF SPECIFIC EMBODIMENTS

[0023] One or more specific embodiments will be described below. In an effort to provide a concise description of these embodiments, not all features of an actual implementation are described in the specification. It should be appreciated that in the development of any such actual implementation, as in any engineering or design project, numerous implementation-specific decisions must be made to achieve the developers' specific goals, such as compliance with system-related and business-related constraints, which may vary from one implementation to another. Moreover, it should be appreciated that such a development effort might be complex and time consuming, but would never-